

# Los Altos Community Botball Team Announcement for 2018 Season

Michael Schuh

## Summary

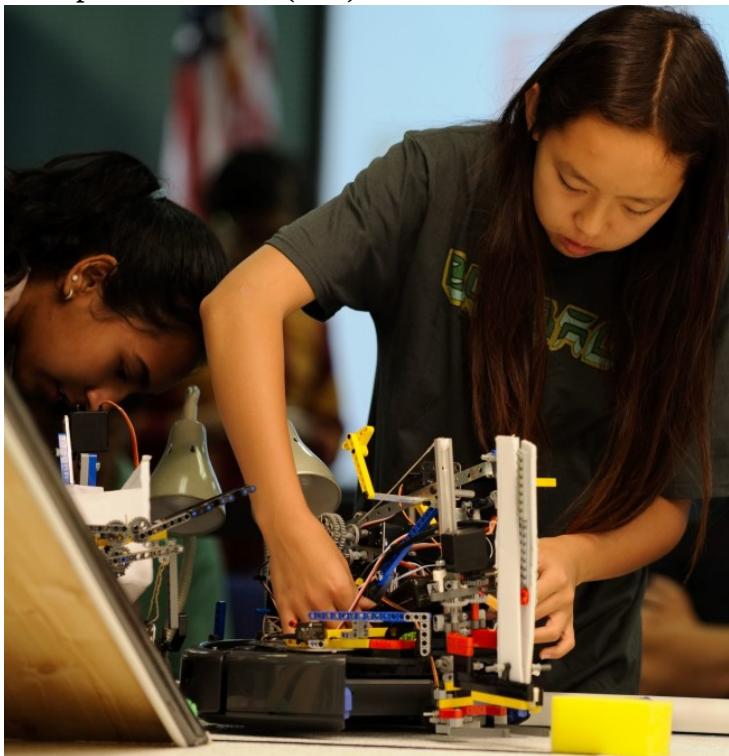
Botball is a robotics sports program that is made up of teams that use a robot controller, motors, switches, analog sensors, digital sensors, and LEGO pieces to construct a robot. The teams use their robots to compete against other teams in a game that takes place on an 8' x

8' playing field. The robots score points by moving and placing playing field objects into scoring positions. Through the last fifteen years, hundreds of students have benefited from the program, and the Los Altos Community Botball Teams have won many awards at the Northern California Botball Tournaments and the International Botball tournaments. For the 2018 season, we are looking for highly motivated and interested Junior High and High School students to join the teams. We also need parents to support the teams. For more information, contact me at [Michael@Boardsailor.com](mailto:Michael@Boardsailor.com) or at my home phone number (650) 965-8037.



## Botball Competition

The goal of the KISS Institute Botball program is to interest and excite high school and middle school students in the areas of science and engineering as they design, construct, and program autonomous robots. The Botball program gives teenagers a fun competitive environment where they learn engineering and programming skills through hands-on experience with robots. The Botball program has been around for many years with local area competitions. The next Botball Northern California Competition will be held on Saturday April 28, 2018 at NASA Ames Research Center. The challenge will be announced on Feb 3, 2018. More information about Botball can be found at [www.botball.org](http://www.botball.org) and [www.kipr.org](http://www.kipr.org).



## Time Commitment

We have found that robot team participants often quickly grow to love the Botball robotics program and want to spend as much time on it as they can. Teams usually schedule five hours of meeting time a week, but we have learned that the most enthusiastic members will spend much more time working on the project. This will of course be at the discretion of the team members. Teams will likely meet on Fridays after dinner and on Sunday afternoons. Typically, most parents spend most of their time with regards to the team transporting their children to and from the meetings and cheering them on at the competition. Some parents spend a lot more time as coaches and assistant coaches.

## Pre-Season Meetings

We will be holding meetings before the competition is released to teach new members how to program and to bring returning members back up to speed. These meetings are important because we have found that once the challenge is released, most fundamental robotics learning stops and team members focus on building robots for the game. **It is very important that new team members attend all of the training meetings.**



*Botball preseasn training meeting*

## Coaching Style

Michael organized the local Boball teams and was the head coach for the first eleven years. He developed a coaching style that has been embraced by other coaches and will likely be continued by this year's coaches. He thinks the team members benefit the most from the robotics programs if they do all the designing, building, and programming. He encourages them, stays out of the way, and as needed, requests that other parents do the same. He makes sure that all of the materials are available and that the team members understand the task. Then he steps back and helps only when needed. The teams that he has coached have had fun, learned a lot, and done well in competitions. The teams this year will be run by a team captain selected by the team members and coach. We will have several returning coaches this year and will recruit coaches for the other teams as needed.

## Cost

The cost of a team is estimated to be \$2,700 of which \$2,500 is the team registration fee. We have some funds available from last year for registering the first team. Last year, we had a total of 68 team members for eight teams and spent \$410 per team member. This amount varies each year based on the number of team members per team and playing field expenses. I think the optimal size of a team is six



students and the maximum reasonable team size is eight to ten students. The main organization is the KISS Institute for Practical Robotics (KIPR). It is a public charity under IRS code 501(c)(3). All contributions to KIPR for the teams are tax deductible to the extent allowed by law and will defray the expenses for all the team members of the Los Altos Community Teams. Since donations are tax deductible and fees are not, we encourage all parents to make a tax deductible donation in the \$250 to \$325 range to cover the team registration. After we have received all of the donations, each team member will be responsible for their part of the remaining cost. Anyone who drops out by January 26 will have their donation returned to them. Any extra funds raised this season will be saved for use for the next year's team(s) and/or helping team members attend the International Botball Competition. Botball qualifies for some company donation matching programs, so please consider this if one of these is available for you. Botball is not an educational institution so company donation matching programs that require the organization to be an educational institution will likely not work.

If your family is having a tough year financially or this is more than your family can afford, feel free to donate whatever amount you want or even skip a year until your conditions improve. I have noticed a correlation between donation amount and team member participation. There have been bigger donations from families where their child has spent a lot of time working on Botball and smaller donations from those less active. This works for me and makes a lot of sense. We organize Botball teams to benefit the kids and somehow all of the funding thankfully works out.

## **Meeting Place**

Training meetings will take place at the NASA Ames Research Center located of highway 101 on Moffett Blvd. Four team member parents have volunteered to host the regular season team meetings for their child's team at their homes. We could use another team meeting location or two for the regular season. The meeting place needs to have room for an 8' x 8' playing field and several laptop computers. If you are willing to host a team, please let me know. You don't have to coach to host a team.



## **Schedule**

January 4 from 7:30 pm until 9 pm	Informational Meeting for potential team members and their parents at <a href="#">Mountain View High School in room 525</a> .
December - January 5	Identify potential team members.
January 5	Applications due.
January 14	Notify applicants who are accepted.
January 26	Last day to drop and receive full refund. Must tell Michael before the 7 pm training meeting start time.
January 5-26	Team training meetings from 7:00 PM until 9:30 PM at the NASA Ames Research Center, Building 3 Ballroom, to cover <ul style="list-style-type: none"><li>• 1/5 – Programming the robots in KISS C</li><li>• 1/12 – Servos, Variables, If, Else, and While</li><li>• 1/19 – Programming, Functions, Libraries</li><li>• 1/26 – Using the iCreate, more sensors, Drive Library, team meet-up</li></ul>
Feb 3-4	Botball training workshop – 3 new team members/team can go. Game announced on Feb 3.
Feb 3-April 27	Build, design, program, and prepare for the competition. Minimum of two weekly meetings will likely be Friday evenings and Saturday or Sunday afternoons.
April 28	Northern California Tournament at the NASA Ames Research Center
May 20	All team end of season pot-luck dinner in Los Altos area
July 25-29	International Competition Tournament in Indian Wells, California

## **Assistance is Needed**

We will certainly have four teams and will likely have enough interest to support six or more teams so we need enough coaches and meeting places. The teams also would appreciate help with fund raising. Contact Michael if you are willing to coach or host a team. We have a bunch of great team member parents so this will all work out fine.

## **Expectations/Rules**

All team member participants are expected to help design, build, and program the robots. Team members can specialize or work on a variety of tasks. In order to be an effective team, members who are disruptive or disrespectful inside or outside of the team meetings will be warned and then removed from their team. The coach will have final say in who is accepted, removed or kept on the teams. The coaches have yet to remove a team member but reserve the right to do so if the need arises. Most of the team meetings are lots of fun with some great camaraderie.

## **Other Options for being on a Botball Team**

If you want to be on a Botball team other than one of the Los Altos Community Teams or you didn't make our deadlines, you can find all of the information you need to form a team at [www.botball.org](#) or you can talk with us about it. If you missed the application deadline and are still interested, check with us to see if we have room for you.

## **How to Apply**

Complete the [web form available here](#) and at <http://boardsailor.com/botball> and complete and sign the Application Information requested below to Michael Schuh and mail him your donation. The check will not be cashed until applicants are notified that they are on a team. Applicants can request their money back and remove their name from the list at any time before January 26. We would like everyone to donate to KISS Institute for Practical Robotics in the \$250 to \$325 range to support the team. If this is more than you can contribute, please include a check for what you are able to contribute. Botball qualifies for some company donation matching programs, so please consider this if one of these is available for you. Botball is not an educational institution so company donation matching programs that require the organization to be an educational institution will likely not work.

## **Application Information**

Name: \_\_\_\_\_

Grade: \_\_\_\_\_ Age: \_\_\_\_\_ School: \_\_\_\_\_

Phone number: \_\_\_\_\_

Parent's Name(s): \_\_\_\_\_

Check Amount (Made out to the **KISS Institute for Practical Robotics**): \_\_\_\_\_

Are you planning on asking for matching funds for your donation? (Yes/No): \_\_\_\_\_  
If yes, please tell me your company's name \_\_\_\_\_

I have read the cost and expectations/rules sections of the announcement and understand that that the team coach makes all decisions as to who will be on a team and reserves the right to remove a member after one warning for unacceptable behavior.

\_\_\_\_\_ Student's Signature

\_\_\_\_\_ Parent's Signature

Mail your signed application form (this page is all that is needed) and check to Michael Schuh at 1630 Elmhurst Drive, Los Altos, CA 94024 or bring it to the January 4 informational meeting at Mountain View High School in room 525.

Be sure and also complete the [web form available here](#) and at <http://boardsailor.com/botball> .  
The application is also available at <http://boardsailor.com/botball>

If we don't have enough coaches and meeting places, we will have to turn away applicants. Fortunately, we have not had to do this yet. If needed, the Los Altos Community Botball Teams Board of Directors will decide who is accepted or not.

Call (650) 965-8037 or email [Michael@Boardsailor.com](mailto:Michael@Boardsailor.com) if you have any questions or need more information.